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## **ABSTRACT**

An oscilloscope adapter for a portable electronic device includes a hardware interface connector and a computer program memory. The memory stores computer program instructions that direct the electronic device to collect data representative of a signal from an external source and display the data as a waveform comprising individual data values as a function of time. The user may select one or more of the scales of the graph. The adapter also may include one or more of a model waveform database, a collected waveform database, an application-specific database, and a language database.